ARIZONA DEPARTMENT OF HEALTH SERVICES

Recommendations for School Diagnostic Testing

Diagnostic tests check samples from the respiratory system, such as a swab from the inside of the nose, to see if someone is currently infected with SARS-CoV-2, the virus that causes COVID-19. Some tests are point-of-care (POC) tests, meaning results may be available at the testing site in less than an hour. Other tests must be sent to a laboratory to analyze, a process that may take 3–5 days once received by the lab.

The Centers for Disease Control and Prevention (CDC) recommends diagnostic testing for:

- Individuals with signs or symptoms consistent with COVID-19.
- Asymptomatic individuals with recent known or suspected exposure to SARS-CoV-2 to control transmission.

The sections below provide recommendations on testing methods and procedures for schools.

Type of Test

Recommended

- A diagnostic test for SARS-CoV-2, including:
  - Polymerase Chain Reaction (PCR)
  - Antigen

Not Recommended

- Antibody/serology tests are NOT diagnostic, so they are not recommended for screening for current infection.

Test Use

Recommended

- As needed, when individuals have signs or symptoms consistent with COVID-19
- When individuals have a recent known or suspected exposure to someone with COVID-19.

Not Recommended

- Discontinuation of isolation or quarantine for individuals to return to school (i.e., requiring a negative test result to return to school).
- Screening asymptomatic individuals with no known exposure to COVID-19 (e.g., entry into school, school events, sport teams).

Planning for Specimen Collection, Testing, and Data Management

- Establish a plan that outlines who is responsible for performing specimen collection from staff and students, a process for specimen collection and transport (if needed), and who is responsible for conducting POC testing.
  - Consider what school staff can collect specimens on themselves/from other staff or whether additional support is needed for specimen collection (i.e., specimen collection contractor). The facility's staff may need to be trained to collect

specimens correctly. Training should include infection prevention and control requirements and correct personal protective equipment (PPE) use.
    - Determine whether individuals can be tested at the facility or if they will be tested off-site.
        - Develop an informed consent process to ensure the school can perform the tests and receive results.
        - Facility policies and procedures should be referenced for individuals refusing to be tested.
    - Determine how results will be shared with the school, the Arizona Department of Health Services (ADHS), and the local health department.
    - Determine a process that captures which individuals were tested or were unable to be tested.

Coordinating Reporting of Testing Results

- For off-site testing, laboratories that can quickly process large numbers of tests with rapid reporting of results (e.g., within 48 hours) should be selected for testing intended to inform school initiatives to prevent and limit transmission.
    - Ideally, a single laboratory should be selected to process specimens to facilitate data collection and analysis.
    - Most laboratories have a process in place to report results to public health as required.
- Report positive and negative results of on-site COVID-19 testing (e.g., antigen testing) directly to ADHS pursuant to Executive Order 2020-37. There are two methods for reporting these results to ADHS:
    - The preferred method is to register your school with this Google Form. Once registered, you will receive another link to enter reports into a separate Google Form. A guidance document on this process is available on the Lab Resources webpage.
    - The second option is to follow the flat file reporting requirements outlined on the Lab Resources webpage. If files are not submitted in the proper format, you will be required to resubmit the file in the appropriate format.
- Ensure suspected outbreaks of COVID-19 are reported to the local health department in accordance with Emergency Measure 2020-03.
- Testing should be carried out in a way that protects confidentiality to the extent possible and is consistent with applicable laws and regulations.
- When employers become aware of cases, the Recordkeeping and Reporting Occupational Injuries and Illness standard (29 CFR 1904), requires certain employers to keep a record of serious work-related injuries and illnesses including work-related COVID-19.

Considerations for Use of Antigen Testing

Uses of antigen testing in schools

- Testing of symptomatic individuals.
- Testing of asymptomatic individuals in schools as part of an COVID-19 exposure or outbreak response.

Antigen tests should not be utilized to determine when individuals can return to school nor for screening asymptomatic individuals with no known exposure to COVID-19.

Considerations for when performing testing

- Before beginning testing, read and become familiar with the instrument manufacturer's instructions/package insert (abbreviated to IFU), and user manual if included.
    - Be familiar with the timing of the tests. Most antigen tests need to either sit for 15 minutes before being read or must be read within a specified window or they will not be valid. This information can be found in the package insert instructions.
- Quality control (QC) must also be performed before testing and should be based on the manufacturer's recommendations.
    - If issues are noted with the QC, or it does not pass, contact the instrument manufacturer technical support.
- Before testing, it is recommended to have all supplies on hand, including a timer, sharpie or other marker that can write on the testing kits to label samples, a spreadsheet or similar form to document the results, and a biohazard disposal to discard used testing cassettes and collection swabs.
- If collecting samples before immediate testing, ensure samples are properly labeled with patient identifying information.

Recommendations for Specimen Collection

General considerations

- Follow CDC's Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 (COVID-19)
- The number of people present during specimen collection should be limited to only those essential for care and procedure support.
    - Bystanders should not be present for specimen collection.
- Swabbing of multiple individuals should not be performed in the same room at the same time, unless appropriate separation between swabbing stations can be maintained.

Consider if self-collection is appropriate

- Some diagnostic tests use samples that are self-collected, such as saliva and nasal swabs.
- PPE use can be minimized through self-collection while staff remain at least 6 feet away from the individual being swabbed.
- Nasal Swabs: The individual must be able to correctly self-swab and place the swab in transport media or sterile transport device and seal.
    - If the individual needs assistance, assistance can be provided by placing the swab into transport media or a sterile transport device and sealing it for them.
- If bulk-packaged swabs are used for sample collection, care must be exercised to avoid contamination of any of the swabs in the bulk-packaged container.

Location of specimen collection

- Ideally, specimen collection should be performed one individual at a time in a room with the door closed and no other individuals present. If individual rooms are not available, other options include:
    - Large spaces (e.g., gymnasiums) where sufficient space can be maintained between swabbing stations (e.g., greater than 6 feet apart).
    - An outdoor location, weather permitting, where other individuals will not come near the specimen collection activity.
- Considerations for multiple individuals being swabbed in succession in a single room:

    - Consider the use of portable HEPA filters to increase air exchanges and to expedite removing infectious particles.
    - Minimize the amount of time the individuals will spend in the room. Individuals awaiting swabbing should not wait in the room where swabbing is being done. Those swabbed should have a face mask or cloth cover in place throughout the process, only removing it during swabbing.
- Minimize the equipment kept in the specimen collection area. Consider having each person bring their own prefilled specimen bag containing a swab and labeled sterile viral transport media container into the testing area from the check-in area.

PPE for swabbing

- Staff in the room or specimen collection area should wear an N95 or higher-level respirator (or surgical mask if a respirator is not available) and eye protection. A single pair of gloves and a gown should also be worn for specimen collection or if contact with contaminated surfaces is anticipated.
    - If respirators are not readily available, they should be prioritized for other procedures at higher risk for producing infectious aerosols (e.g., nebulizer treatment), instead of for specimen collection.
- Extended use of respirators (or surgical masks) and eye protection is permitted. However, care must be taken to avoid touching the face and eye protection. If extended use equipment becomes damaged, soiled, or hard to breathe or see through, it should be replaced. Hand hygiene should be performed before and after touching PPE.
- Gloves should be changed and hand hygiene performed between each person being swabbed.
- Gowns should be changed when there is more than minimal contact with the person or their environment. The same gown may be worn for swabbing more than one person provided the staff collecting the test minimizes contact with the person being swabbed. Gowns should be changed if they become soiled.
- Consider having an observer who does not engage in specimen collection but monitors for breaches in PPE use throughout the specimen collection process.
- Staff who are handling specimens, but are not directly involved in collection (e.g., self-collection) and not working within 6 feet of the individual being tested, should follow Standard Precautions; gloves are recommended, as well as a surgical mask or face mask.

Cleaning and disinfection between individuals

- Surfaces within 6 feet of where specimen collection was performed should be cleaned and disinfected using an Environmental Protection Agency-registered disinfectant from List N if visibly soiled and at least hourly.
- Terminal cleaning and disinfection of all surfaces and equipment in the specimen collection area should take place at the end of each day. The school should be cleaned and disinfected in accordance with CDC Cleaning, Disinfection, and Hand Hygiene in Schools – a Toolkit for School Administrators.
- Used testing cassettes and collection swabs should be disposed of in a biohazard container.

Table of Considerations for Onsite vs. Offsite Testing

	As Needed Testing by School (On-site)	As Needed Testing by Laboratory (Off-site)
Reason for Testing	Individuals are symptomatic or have exposure to COVID-19	Individuals are symptomatic or have exposure to COVID-19
Type of Test	Polymerase Chain Reaction (PCR) or Antigen	Polymerase Chain Reaction (PCR) or Antigen
Prerequisites	CLIA Certificate of Waiver Obtain point-of-care instrument and kits Get informed consent to receive results	Contract with laboratory and/or specimen collection contractor Get informed consent to receive results
Who will be tested?	Determine on a case-by-case basis (e.g., individuals with close contact to a known or suspected case: <6 feet for at least 15 minutes)	Determine on a case-by-case basis (e.g., individuals with close contact to a known or suspected case: <6 feet for at least 15 minutes)
Who is collecting specimens?	Self-collection or collection by trained health office staff	Self-collection or collection by trained health office staff
PPE requirements for self-collection and maintaining at least 6 feet distance	Gloves and surgical mask	Gloves and surgical mask
PPE requirements for health professional performing specimen collection	Gloves, gown, surgical mask or respirator, and eye protection.	Gloves, gown, surgical mask or respirator, and eye protection.
Cleaning and disinfection between on-site specimen collections	Clean and disinfect surfaces within 6 feet of specimen collection using EPA List N if visibly soiled at least hourly.	Clean and disinfect surfaces within 6 feet of specimen collection using EPA List N if visibly soiled at least hourly.
School Reporting Requirements	Report positive and negative results to ADHS. Report positive results and suspected outbreaks to local health department.	Report positive results and suspected outbreaks to local health department. Note: Lab will report positive and negative results to ADHS.

Resources

Abbott BinaxNOW COVID-19 Ag Card

- Package Insert
- Training Materials

BD Veritor System for Rapid Detection of SARS-CoV-2

- Ordering Information
- Package Insert
- Webinar Slides

Quidel Sofia SARS Antigen FIA

- Ordering Information
- Package Insert
- Webinar Slides

HHS Webinar: Antigen Testing in Nursing Homes (September 3, 2020)

- Test manufacturers, BD (view slides) and Quidel (view slides) walk through steps associated with performing the BD Veritor and Quidel Sofia SARS-CoV-2 antigen tests.

ADHS

- Emergency Measure 2020-03
- Schools (Childcare and K-12)
- Laboratory Resources
    - Reporting Guidance for Facilities using Point-of-Care Devices
- Release from Isolation and Quarantine Guidance
- Safely Returning to In-person Instruction
- School Benchmarks by County
- BinaxNOW FAQs
- CLIA Information for Point-of-Care Testing

CDC

- Schools and Child Care Programs
- Interim Considerations for Testing for K-12 School Administrators and Public Health Officials
- Guidance for SARS-CoV-2 Point-of-Care Testing
- Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens for COVID-19
- Interim Guidance for Rapid Antigen Testing for SARS-CoV-2
- Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens

CMS

- CLIA FAQs

FDA

- Emergency Use Authorizations for Antigen Diagnostic Tests for SARS-CoV-2